

O1A

Increase Consistency  
Among Districts

## QSIT VALIDATION WORKSHEET

<b>Item #</b>	<b>Goal/Outcome</b>	
O1A (Activity 1)	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
<b>Term<sup>1</sup></b>	<b>Type of activity</b> (test or analysis)	<b>Parameter(s)</b> to be measured
Short	Analysis	Inspectional Objectives and narrative "linkages" described within the "QSIT Inspection handbook"
<b>Scope and nature of the process to be followed.<sup>2</sup></b>	<p>Compare the structure of a QSIT inspection described within the QSIT Inspection Handbook to that of the current comprehensive inspection technique described within DRAFT CP 7382.830 INSPECTION OF MEDICAL DEVICE MANUFACTURERS (May 1997) and the GUIDE TO INSPECTIONS OF MEDICAL DEVICE MANUFACTURERS (December 1997). Determine whether QSIT or the existing technique provides for a more defined, succinct and prescriptive methodology for the comprehensive inspection of medical device manufacturers. Providing a well defined, succinct and prescriptive methodology to all FDA districts will help ensure increased consistency in the inspection of medical device manufacturers among those districts.</p> <p>Overall responsibility for this activity: R. Ruff (HFR-CE350)</p>	
<b>Acceptance criteria (if known)</b>	QSIT inspectional objectives and linkages provide for a more well defined, succinct and prescriptive methodology for the inspection of medical device manufacturers than the current technique.	
<b>Extent to which the activity measures/confirms how well the goal/outcome has been met.<sup>3</sup> (strengths and weaknesses of this validation activity)</b>	This activity will provide direct and objective evidence that the QSIT provides a more well defined, succinct and prescriptive methodology for the inspection of medical device manufacturers than the current technique. A potential weakness in this activity is that some may debate whether a prescriptive technique is as effective as a less prescriptive technique.	
<b>Reason(s) why the activity represents one of the best approaches to measuring the accomplishment of the goal/outcome.</b>	This pre-deployment activity will demonstrate that the QSIT technique is more well defined, succinct and prescriptive than the current technique via a direct comparison.	

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<sup>1</sup> Short term = pre-deployment event, long-term = post-deployment event

<sup>2</sup> Describe who, what, where, when, and how. Include an identification of baseline data that may be useful for comparing QSIT performance to the existing approach.

<sup>3</sup> Include a discussion of any limitations in the ability of the activity to objectively measure the goal/outcome.

## QSIT VALIDATION ACTIVITY REPORT

Item #	Goal/Outcome	
Q1A	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
Activity #	Type of activity (test or analysis)	Parameter(s) to be measured
1	Analysis	Inspectional Objectives and narrative "linkages" described within the "QSIT Inspection Handbook"
Acceptance Criteria	QSIT inspectional objectives and linkages provide for a more well defined, succinct and prescriptive methodology for the inspection of medical device manufacturers than the current technique.	
Summary of Results	<p>A comparison of the structure of a "QSIT" inspection described within the QSIT Inspection Handbook to that of the current comprehensive inspection technique ("T1997C") described within DRAFT CP 7382.830 INSPECTION OF MEDICAL DEVICE MANUFACTURERS (May 1997) and the GUIDE TO INSPECTIONS OF MEDICAL DEVICE MANUFACTURERS (December 1997) was conducted and analyzed. A table documenting the comparison appears as Attachment 1. Both techniques were described in terms of "Tasks". Each task was extracted from the appropriate inspectional reference and documented on Attachment 1. This activity attempted to extract only the tasks which an inspector is instructed to complete during a QSIT or T1997C inspection. Where either technique consisted of narrative discussions of regulatory requirements, no tasks were inferred. An analysis of the number of tasks required to accomplish (1) a comprehensive inspection of a non-sterile medical device manufacturer and (2) a comprehensive inspection of a sterile medical device manufacturer was conducted. This analysis appears as Attachment 2. For this activity the following assumptions were made (1) QS Regulation, MDR, Tracking and Corrections and Removals requirements were all applicable and (2) the manufacturer determined bioburden and used a contract irradiation sterilization service. In addition, Attachment 2 includes an analysis of the number of "References Providing Inspectional Instructions" that are required to be maintained and utilized during QSIT and T1997C inspections. Results include:</p> <ol style="list-style-type: none"> <li>1. The comprehensive inspection of a non-sterile medical device manufacturer using QSIT requires 139 tasks and 1 reference. The comprehensive inspection of a non-sterile medical device manufacturer using T1997C requires 188 tasks and 3 references.</li> <li>2. The comprehensive inspection of a sterile medical device manufacturer using QSIT requires 151 tasks and 1 reference. The comprehensive inspection of a sterile medical device manufacturer using T1997C requires 231 tasks and 4 references.</li> <li>3. T1997C does not reflect contemporary inspectional requirements. E.g. (1) T1997C instructs the investigator to use the "Design Control Inspectional Strategy included in CP7382.830 Attachment F" and provides guidance from the "Transition" period. The referenced strategy has been obsolete and the transition period has been over since June of 1998.</li> <li>4. QSIT provides a sampling methodology or a specific number when records are reviewed. T1997C provides sampling instructions only in CP7382.830A for field examination of sterile packages. In a number of tasks, T1997C requires inspection of "all" records. E.g. (1) "Review all records for the proper disposition of nonconforming products for assurance that use of nonconforming product has not resulted in the distribution of defective devices.", and (2) "Verify history records representing individual devices or lots of devices exist for all finished devices manufactured."</li> </ol> <p>This activity has demonstrated that QSIT will accomplish a comprehensive inspection (including Corrections and Removals) of a non-sterile medical device manufacturer in approximately 26% fewer tasks than T1997C (excluding Corrections and Removals) and utilizing approximately 67% fewer reference sources. This activity has demonstrated that QSIT will accomplish a comprehensive inspection (including Corrections and Removals) of a sterile medical device manufacturer in approximately 35% fewer tasks than T1997C (excluding Corrections and Removals) and utilizing 75% fewer reference sources. Through the use of sampling, QSIT provides "end points" for the review of records that are not prescribed in T1997C. Based upon the following facts (1) there are less tasks associated with QSIT (2) there is only one reference source associated with QSIT (also consider ease of maintenance) (3) the number of records reviewed is prescribed in QSIT and (4) QSIT contains contemporary inspectional requirements, QSIT has been demonstrated to provide a more well defined, succinct and prescriptive methodology for the comprehensive inspection of medical device manufacturers than T1997C.</p>	
Conclusion	The findings do [X] do not [ ] meet the acceptance criteria for this activity.	
Additional Comments	This analysis was conducted prior to the conclusion of QSIT Field Test activities. The number of tasks required to conduct a QSIT inspection may change (increase or decrease) based upon the QSIT Field Test activities.	
Activity Champion(s)	Robert G. Ruff, CSO (HFR-CE350)	
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## QSIT Validation Worksheet Item O1A Activity 1 Comparison (Attachment 1, 10 pages)

QSIT	T1997C
<b>1. Preannouncement Activities</b>	Reference: QSIT Handbook  Task 1 - Request and review copies of Quality Policy and High Level Quality System Procedures (Management Review Procedure, Quality Plan)  Task 1 • Determine if the firm has received complaints Task 2 - Review a sample of complaints (start from most current and work backwards to 24 months max., total depends on a number of factors e.g. skill of Inventor and storage medium)
<b>2. Interview Management Representative</b>	Reference: QSIT Handbook  Task 1 - Management Representative (or designee) interviewed prior to the inspection of each subsystem ( min. 4 ea. interviews)  Task 3 - Ascertain what files contain complaints
<b>3. Inspect Management Controls</b>	Reference: QSIT Handbook  Objective 1: Verify... Task 1 - Quality Policy Task 2 - Management Review Procedures Task 3 - Quality Audit Procedures Task 4 - Quality System Procedures and Instructions ...have been defined and documented.  Objective 2: Verify... Task 1 - Quality Policy has been implemented  Objective 3: Review established organizational structure to assure it includes provisions for... Task 1 - responsibilities Task 2 - authorities Task 3 - resources  Objective 4: Confirm... Task 1 - Management Representative has been appointed Evaluate... Task 2 - Purview of the Management Representative  Objective 5: Verify... Task 1 - Management Reviews are being conducted
	<p>III A. 1. "When conducting all routine GMP inspections you are required to start the inspection with a review of: (1) complaints</p> <p>Task 1 - Determine if the firm has received complaints Task 2 - Review a sample of complaints (start from most current and work backwards to 24 months max., total depends on a number of factors e.g. skill of Inventor and storage medium)</p> <p>Task 3 - Ascertain what files contain complaints</p> <p>Task 4 - Trend complaints (if not done by firm)</p> <p>Task 5 - Analyze to ID existing or potential causes of nonconforming product or quality problems</p> <p>Task 6 - Determine if adequate complaint investigation is performed</p> <p>Task 7 - Determine identity of individuals reviewing complaints</p> <p>Task 8 - Determine the qualifications of the individuals reviewing complaints</p> <p>Task 9 - Confirm all complaints are covered and reported</p> <p>Task 10 - If no complaints received, determine if provisions are in place</p> <p>Task 11 - If no complaints received, determine who will be responsible and MDR reports (see Attachment A, Section I (B),..."</p> <p>Note: "Attachment A" is a list of "Class I Devices exempt from most of the GMP Requirements By Classification Regulations" Attachment C contains guidance for determining manufacturer compliance with the MDR regulation.</p> <p>Task 1 - Determine if there are written MDR procedures Task 2 - Determine if they are complete Task 3 - Determine if they are followed Task 4 - Determine if event files are maintained Task 5 - Determine if the file is easy to ID/access Task 6 - Determine if files contain the necessary reports and correspondence Task 7 - Determine if the files contain documentation regarding decisions not to file an MDR Task 8 - Document credentials of qualified medical staff making decision not to file Task 9 -Determine if the file contains copies of failure analyses, etc. Task 10 - Determine if MDR files contained in GMP files are readily IDable</p>

**Objective 6:** Verify...

Task 1 • Quality Audits are conducted at sufficient frequency

Task 2 • Effectiveness of Audit

Task 3 • Independence of Auditor

Task 4 • Adequacy of Audit Procedure

Task 5 • Communication of findings to Upper Management

Task 6 • Corrective Actions implemented and Re-audits

#### **4. Inspect Design Controls**

Reference:

QSIT Handbook

**Objective 1:** Select Design Project (if applicable)

Task 1 • Select a design project that meets 820.30(a)

**Objective 2:** Verify...

Task 1 • Design Control Procedures are defined and documented  
Task 2 • DC Procedures address the specific requirements of 820.30

**Objective 3:** Review...

Task 1 • The Design and Development Plan

**Objective 4:** Confirm...

Task 1 • Design Inputs were established

Review...

Task 2 • Sources of input

Determine...

Task 3 • That relevant aspects were included

**Objective 5:** Verify...

Task 1 • Essential outputs are identified

Review...

Task 2 • Method for identifying essential outputs

**Objective 6:** Confirm...

Task 1 • Verification acceptance criteria established prior to activity  
Task 2 • Validation acceptance criteria established prior to activity

**Objective 7:** Determine if...

Task 1 • Verification confirms output meets input (Sample Tables)

**Objective 8:** Confirm...

Task 1 • Validation data shows user needs and intended uses met

Task 11 • Examine files for computer generated "deficiency" letters  
Task 12 • If deficiency letter received discuss and determine if problem resolved

III A. 1. (cont'd) "...(2) changes which the manufacturer has made in the design or manufacturing process,

Task 1 - Review design changes (see below "Design Control Report and Guidance")

Task 2 - Review manufacturing process changes

Task 3 - Determine if changes are validated and/or verified

Task 4 - Determine if there are a series of changes for the same problem

Task 5 - Document all design changes on DCIS Report

and (3) records of production lots which failed in-process or finished device testing.

Task 1 - Determine if the firm released lots that failed to meet specifications

Task 2 - Review DHR's or in-process control records of lots that have been rejected

Task 3 - Report and document shipment

Task 4 - Evaluate MRB rationales (if applicable)

Task 5 - Review re-work records

Task 6 - Determine if rework is adequate

Task 7 - Determine that rework does not affect S & E

Task 8 - Determine if sampling plans for inspection are acceptable

Task 9 - Determine if sampling plans for rework are acceptable

Task 10 - Analyze and trend nonconforming product records

Task 11 - Inspect data for repeat component failures

Task 12 - Determine if procedures to control nonconforming product are established

Task 13 - Determine if procedure is complete

Task 14 - Review all records of nonconforming product to ensure they didn't ship defective product.

Task 15 - Review concessions

Task 16 - Evaluate concessions for 510(k) applicability

"Any indications of problems that your review identifies will provide a focus for your inspection. If you do not find indications of problems after reviewing the above records, complete the inspection as directed in the Guide to Inspection of Medical Device Manufacturers and the Design Control Inspectional Strategy..."

Select devices for coverage based on above findings (plus service record review) or "...because of what they are made of or how they are made, have the highest potential for problems that could result in the design, manufacture and/or distribution of unsafe or unreliable devices."

<p><b>Objective 9: Confirm...</b></p> <p>Task 1 - Validation did not leave unresolved discrepancies</p> <p><b>Objective 10: Confirm...</b></p> <p>Task 1 - Software is validated (if device contains software)</p> <p><b>Objective 11: Confirm...</b></p> <p>Task 1 - Risk Analysis was completed</p>	<p><b>Objective 12: Determine if...</b></p> <p>Task 1 - Validation was accomplished using initial production devices or their equivalents</p> <p>Review...</p> <p>Task 2 - Equivalency when equivalent devices are used</p> <p><b>Objective 13: Confirm...</b></p> <p>Task 1 - A pre-production change was controlled appropriately</p> <p>Task 2 - A post-production change was controlled appropriately</p> <p><b>Objective 14: Determine...</b></p> <p>Task 1 - If design reviews were conducted</p> <p>Confirm...</p> <p>Task 2 - An individual without direct responsibility was included</p> <p>Task 3 - Outstanding action items have or are being resolved</p> <p><b>Objective 15: Determine if...</b></p> <p>Task 1 - The design was correctly transferred</p> <p>Compare...</p> <p>Task 2 - The device master record against outputs (Sample Tables)</p>	<p><b>Servicing:</b></p> <p>Task 1 - Determine if adequate system is in place to screen service and repair reports for complaints</p> <p>Task 2 - Cross- reference service related complaints in complaint handling system</p> <p>Task 3 - Review service reports for MDR events</p> <p><b>Corrective and Preventive Actions:</b></p> <p>Task 1 - Determine whether the firm has conducted any recalls or market withdrawals</p> <p>III A. 6 "Confirm that all subject recalls conducted by the establishment since the last inspection have, in fact, been reported to the district office. Also review files to determine if all events filed by the establishment as Class III recalls have been properly classified..."</p> <p>Task 2 - Determine if the firm has established CAPA procedures</p> <p>Task 3 - Determine if the firm analyzes repair and service records for warranty failure trends</p> <p>Task 4 - Review records of investigations to ID common failure trends</p> <p>Task 5 - Compare these trends with corrective action documentation</p> <p>Task 6 - Conduct "detailed" inspection of CAPA records</p> <p>Task 7 - Review trending information performed by firm</p> <p>Task 8 - Review corrective actions already implemented</p> <p>Task 9 - Review service records (amount relates to same criteria as for complaints)</p> <p>Task 10 - Determine if service reports were analyzed for existing or potential causes of nonconforming product or other quality problems</p> <p>Task 11 - Review for trends by sorting "fields"</p> <p><b>Process Validation:</b></p> <p>Task 1 - Determine if the results of the process cannot be fully verified by subsequent inspection and test</p> <p>Task 2 - Determine if processes are contributing to defective products</p> <p>Task 3 - Review process validation to ID defect characteristics and expected rates</p> <p>Task 4 - Review first and last article test results</p> <p>Task 5 - If problems, question control parameters, environmental conditions, components etc.</p> <p>Task 6 - Determine whether adequate prospective or retrospective validation was performed</p>
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5. Inspect CAPA	Reference: QSR Handbook
<p>Objective 1: Verify...  Task 1 - CAPA Procedures are defined and documented  Task 2 - CAPA Procedures address the specific requirements of 820.100</p> <p>Objective 2: Determine if...(re: corrective action)</p> <p>Task 1 - Appropriate sources of quality data have been identified  Confirm...  Task 2 - The data is being analyzed</p> <p>Objective 3: Determine if...(re: preventive action)  Task 1 - Appropriate sources of quality data have been identified  Confirm...  Task 2 - The data is being analyzed</p> <p>Objective 4: Verify that quality data is... (Sample Tables)  Task 1 - Entered  Task 2 - Complete  Task 3 - Accurate  Task 4 - Timely</p> <p>Objective 5: Verify...  Task 1 - Appropriate statistical methods are employed  Task 2 - Non-statistical methods are employed  Determine if...  Task 3 - Results are compared across different data sources  Objective 6: Determine if... (Sample Tables)  Task 1 - Failure investigation procedures are followed  Task 2 - Investigation is commensurate with the significance and risk  Task 3 - Root cause identified  Verify...  Task 4 - Control for prevention of distribution of nonconforming product  Task 1 - Appropriate actions are taken</p> <p>Objective 7: Determine if... (Sample Tables)  Task 1 - Appropriate actions are taken</p> <p>Objective 8: Determine if...  Task 1 - The action(s) were effective  Task 2 - The action(s) were verified or validated  Confirm...  Task 3 - The action(s) do not adversely affect the finished device</p>	<p>Components:</p> <p>Task 1 - Determine if nonconforming devices are manufactured because of nonconforming components (review complaints, concessions, etc.)  Task 2 - Determine if appropriate statistical method is used for acceptance sampling  Task 3 - Review and evaluate test and/or screening of components  Task 4 - For JIT vendors, review audit procedure and schedule</p> <p>Quality Audits:</p> <p>Task 1 - Determine if written audit procedure exists  Task 2 - Determine frequency of audits  Task 3 - Interview an auditor (if possible)  Task 4 - Determine whether corrective action by upper management is being taken  Task 5 - Confirm re-audits of deficient matters are conducted when required</p> <p>Design Controls:</p> <p>Note: Although the DRAFT CP 7382830 and December 1997 Guide to Inspection of Medical Device Manufacturers refer to the Design Control Inspectional Strategy, for this comparison, I used the tasks described in the Design Control Report and Guidance which is contemporary.</p> <p>Task 1 - Select a device subject to design controls  Task 2 - Determine whether the design project related to an original design or modification to an existing design  Task 3 - Determine at what stage in the design project, design controls were applied  Task 4 - Determine if Design and Development plan is complete  Task 5 - Determine whether the plan was reviewed, updated and approved  Task 6 - Review design input procedures  Task 7 - Confirm design input procedures are complete  Task 8 - Review process for resolving incomplete, ambiguous...requirements  Task 9 - Review how design input addresses user interface  Task 10 - Confirm design input is reviewed, approved and documented  Task 11 - Review design output procedures  Task 12 - Confirm design outputs expressed in terms that allow comparison to inputs  Task 13 - Review technique for identification of essential outputs  Task 14 - Confirm that design output is reviewed, approved and documented  Task 15 - Review design review procedures  Task 16 - Ensure reviews are comprehensive  Task 17 - Confirm manufacturer has IDed appropriate stages for review  Task 18 - Review documentation from at least one design review</p>

<p><b>Objective 9:</b> Verify that... (Sampling Tables)</p> <p>Task 1 - Corrective and preventive actions are documented</p> <p>Task 2 - Corrective and preventive actions have been implemented</p> <p><b>Objective 10:</b> Determine if...</p> <p>Task 1 - Information is properly disseminated to responsible individuals</p> <p>Task 2 - Information is disseminated for management review</p>	<p>Task 19 - Confirm problems or action items were addressed</p> <p>Task 20 - Review design verification procedures</p> <p>Task 21 - Review verification methods and data</p> <p>Task 22 - Review procedures for design validation</p> <p>Task 23 - Confirm validation was accomplished per procedure</p> <p>Task 24 - If "equivalent" devices used, review how "equivaleency" was determined</p> <p>Task 25 - Review clinical and non-clinical evaluations</p> <p>Task 26 - Review software validation (where applicable)</p> <p>Task 27 - Identify risk analysis tools and techniques</p> <p>Task 28 - Confirm data demonstrates needs of user and intended use met</p> <p>Task 29 - Review design transfer procedure</p> <p>Task 30 - Confirm that design transfer procedures were followed</p> <p>Task 31 - Compare significant elements of DMR to finished design outputs</p> <p>Task 32 - Review design change procedures</p> <p>Task 33 - Confirm changes were made according to procedure</p> <p>Task 34 - Confirm procedure assures changes are validated or verified</p> <p>Task 35 - Confirm there is written justification when verified but not validated</p> <p>Task 36 - Confirm design changes are reviewed, approved and documented</p> <p>Task 37 - Confirm changes were appropriately communicated</p> <p>Task 38 - Confirm DHF contains necessary elements</p> <p>Task 39 - Confirm the firm can identify each device in design family or group</p> <p>PMA Devices</p> <p>Task 1 - Determine if site is approved</p> <p>Medical Device Tracking</p> <p>Task 1 - Determine if device is a tracked device</p> <p>Task 2 - Determine whether procedures exist</p> <p>Task 3 - Determine adequacy of procedures</p> <p>Follow-up to OAI Inspection: (if applicable)</p> <p>Task 1 - Determine whether all previous FDA-483 observations were investigated</p> <p>Task 2 - Determine implementation of all corrective actions re: previous FDA-483</p> <p>Personnel:</p> <p>Task 1 - Look for examples of potential training deficiencies</p> <p>Task 2 - Verify firm has procedures for identifying training needs</p>		
<p><b>6. Inspect P&amp;PC</b></p> <table border="1"> <tr> <td>Reference:</td> <td>QSIT Handbook</td> </tr> </table> <p>Objective 1: Select a process...</p> <p>Task 1 - Select a process based on criteria</p> <p>Objective 2: Review... (Sample Tables)</p> <p>Task 1 - The procedures for the process selected</p> <p>Task 2 - The control methods</p> <p>Task 3 - The monitoring methods</p> <p>Confirm...</p> <p>Task 4 - Equipment is maintained</p> <p>Task 5 - Test equipment is controlled</p> <p>Task 6 - Test equipment is calibrated</p> <p>Verify...</p> <p>Task 7 - DHR's vs. DMR</p> <p>Task 8 - Purchasing controls are employed</p> <p>Task 9 - Receiving acceptance activities</p> <p>Task 10 - In-process acceptance activities</p> <p>Task 11 - Finished device acceptance activities</p> <p>Task 12 - Environmental controls</p> <p>Task 13 - Contamination controls</p> <p>Task 14 - Statistical techniques</p> <p>Verify...</p> <p>Objective 3: If problem with DHR's...</p> <p>Determine if...</p> <p>Task 1 - Nonconformance(s) were recognized</p> <p>Task 2 - Nonconformance(s) handled appropriately</p> <p>Task 3 - Quality data fed to CAPA</p> <p>Review...</p> <p>Task 4 - Equipment adjustment</p> <p>Task 5 - Equipment calibration</p> <p>Task 6 - Equipment maintenance</p>	Reference:	QSIT Handbook	
Reference:	QSIT Handbook		

- Evaluate validation study...
- Task 7 - Instruments calibrated
- Task 8 - Instruments maintained
- Task 9 - Confirm predetermined product specifications
- Task 10 - Test sampling plans valid
- Task 11 - Objective evidence specs met consistently
- Task 12 - Tolerances challenged
- Task 13 - Equipment properly installed
- Task 14 - Equipment properly adjusted
- Task 15 - Equipment properly maintained
- Task 16 - Monitoring instruments calibrated
- Task 17 - Monitoring instruments maintained
- Task 18 - Changes properly challenged
- Task 19 - Operators appropriately qualified

Objective 5: Confirm software is validated...  
Review...

- Task 1 - Software requirements document
- Task 2 - Software validation protocol
- Task 3 - Software validation activities
- Task 4 - Software change controls
- Task 5 - Software validation results

Objective 6: Verify... (Sample Tables)

- Task 1 - Employees are aware of device defects
- Task 2 - Employees conducting QC inspections aware of defects and errors

Task 3 - Review training records

Task 4 - Verify all personnel have been made aware of defects

Task 5 - Verify personnel involved with verification or validation are aware of defects, etc.

Document Controls:

- Task 1 - Verify written procedures are signed and dated as approved
- Task 2 - Verify DMR is signed and dated as approved
- Task 3 - Verify DHR is signed and dated as approved
- Task 4 - Assure all documents are available at point of use
- Task 5 - Review document change records

Purchasing Controls:

- Task 1 - Verify written procedures capture necessary requirements
- Task 2 - Verify firm's evaluation of suppliers
- Task 3 - Verify type and extent of control activities is defined based on evaluations
- Task 4 - Verify that there are records of acceptable suppliers
- Task 5 - Verify the firm has written requirements for purchased items and services

Identification and Traceability:

- Task 1 - Compare DMR's with DMR to ensure appropriate components were used in each stage of manufacturing
- Task 2 - Compare DHR's against incoming and in-process acceptance activities to ensure only "passed" product was used

Production and Process Controls:

- Task 1 - Verify specifications and documented work instructions are provided for all processes in which variations could result in failure of the finished device to meet specifications
- Task 2 - Verify specification and procedure changes are reviewed and approved using a formal process and procedure
- Task 3 - Verify new specifications and procedures are reviewed and approved using a formal process and procedure
- Task 4 - Determine if components or devices are reworked
- Task 5 - Verify written rework procedures are provided
- Task 6 - Determine if manufacturer has assessed effect of rework
- Task 7 - Determine if this assessment is documented

<p><b>7. Inspect Sterilization Process Controls Replaces P&amp;PC if Sterilization is process selected for inspection</b></p> <p>Objective 1: Review...</p> <p>Task 1 - Validation Study Summary and Approval Or, assess complete validation study ...</p>	<p>Reference: QSIT Handbook</p>	<p>Task 8 - Verify that there are documented inspections of environmental controls Task 9 - Verify the washing and toilet facilities are clean and adequate Task 10 - Verify clothing requirements and controls are adequate Task 11 - Verify that contamination procedures exist Task 12 - Verify that the contamination procedures are adhered to Task 13 - Verify eating, drinking and smoking is limited to designated areas (if applicable)</p> <p>Task 14 - Verify that sewage, trash etc. is handled appropriately Task 15 - Verify personnel are clean, healthy, etc.</p> <p>Task 16 - Verify personnel are excluded from affected operations when appropriate Task 17 - Verify written procedures require employees to report health conditions Task 18 - Verify there are written maintenance procedures and schedules Task 19 - Verify there is written documentation of maintenance activities Task 20 - Verify equipment inherent limitations are visibly posted Task 21 - Verify periodic inspections are conducted of maintenance schedules Task 22 - Verify that these inspections are per a written procedure Task 23 - Verify manufacturing material is removed or limited Task 24 - Verify there are written procedures for the control of man, material Task 25 - Verify software of production equipment is validated Task 26 - Verify software of quality system equipment is validated Task 27 - Verify changes to software are validated and approved Task 28 - Verify validation activities are documented Task 29 - Verify inspection, measuring and test equipment is checked Task 30 - Verify inspection, measuring and test equipment is calibrated Task 31 - Verify inspection, measuring and test equipment is inspected Task 32 - Verify inspection, measuring and test equipment is maintained Task 33 - Verify these activities are according to written procedures Task 34 - Verify these activities are documented Task 35 - Verify the procedures include provisions for handling, preservation and storage Task 36 - Verify Handling, preservation, etc. activities are documented Task 37 - Verify written calibration procedures include specific limits, etc. Task 38 - Review calibration records Task 39 - Verify remedial actions are documented when limits are exceeded Task 40 - Verify standards are traceable to nat'l or int'l standard Task 41 - Verify calibration records are displayed on or near ea. piece of equipment Task 42 - Verify calibration records include equip. ID, calib. dates, next calib. date</p>
		<p>Objective 2: Review...</p> <p>Task 1 - The procedures for the sterilization process selected Task 2 - The control methods Task 3 - The monitoring methods Confirm...</p> <p>Task 4 - Equipment is maintained Task 5 - Test equipment is controlled Task 6 - Test equipment is calibrated Verify ...</p> <p>Task 7 - DHR's vs. DMR Task 8 - Purchasing controls are employed Task 9 - Receiving acceptance activities Task 10 - In-process acceptance activities Task 11 - Finished device acceptance activities Task 12 - Packaging integrity acceptance activities Task 13 - Environmental controls Task 14 - Contamination controls Task 15 - Statistical techniques</p>

<p><b>Objective 3:</b> If problem with DHR's... Determine if...</p> <ul style="list-style-type: none"> <li>Task 1 - Nonconformance(s) were recognized</li> <li>Task 2 - Nonconformance(s) handled appropriately</li> <li>Task 3 - Quality data fed to CAPA</li> <li>Task 4 - Re-test is appropriate (if applicable)</li> <li>Task 5 - Effects of re-sterilization are understood (if applicable)</li> </ul> <p>Review...</p> <ul style="list-style-type: none"> <li>Task 6 - Equipment adjustment</li> <li>Task 7 - Equipment calibration</li> <li>Task 8 - Equipment maintenance</li> </ul> <p><b>Objective 4:</b> Confirm software is validated...</p> <p>Review...</p> <ul style="list-style-type: none"> <li>Task 1 - Software requirements document</li> <li>Task 2 - Software validation protocol</li> <li>Task 3 - Software validation activities</li> <li>Task 4 - Software change controls</li> <li>Task 5 - Software validation results</li> </ul> <p><b>Objective 5:</b> Verify... (Sample Tables)</p> <ul style="list-style-type: none"> <li>Task 1 - Employees are aware of device defects</li> <li>Task 2 - Employees conducting QC inspections aware of defects and errors</li> </ul>	<p>Labeling and Packaging control:</p> <ul style="list-style-type: none"> <li>Task 1 - Verify the firm has labeling operation control procedures</li> <li>Task 2 - Verify the procedures are adequate</li> <li>Task 3 - Verify packaging and shipping containers are adequate</li> </ul> <p>Handling, Storage, Distribution and Installation</p> <ul style="list-style-type: none"> <li>Task 1 - Review distribution records against final inspection and quarantine records</li> <li>Task 2 - Review records of receipt and dispatch to confirm procedures are followed</li> <li>Task 3 - Review service records to ensure service is not required immediately after installation</li> </ul> <p>Records:</p> <ul style="list-style-type: none"> <li>Task 1 - Encourage firm to mark records they deem to be confidential</li> <li>Task 2 - Review DMR for completeness</li> <li>Task 3 - Ensure there is a formal method for approving and changing the DMR</li> <li>Task 4 - Verify there are DHR's for all finished devices</li> <li>Task 5 - Verify DHR's contain evidence that labeling was examined prior to use</li> </ul> <p>Pre-Approval Device Inspection (PMA, and Class III 510(k)):</p> <ul style="list-style-type: none"> <li>Task 1 - Verify accuracy of information submitted</li> <li>Task 2 - Assess the firm's ability to meet the QS Reg.</li> <li>Task 3 - Determine if changes were communicated to review staff</li> </ul> <p>Sterile Devices:</p> <ul style="list-style-type: none"> <li>Task 1 - Obtain records to document any deficiencies related to validation</li> <li>Task 2 - Determine if firm is or may be manufacturing nonsterile devices (via review of release records, process records, bioburden records, product and packaging changes, etc.)</li> <li>Task 3 - Review records of lots with positive sterility test results</li> <li>Task 4 - Review records of lots with positive BI results</li> <li>Task 5 - Review any re-sterilization records due to process failures</li> <li>Task 6 - Verify re-sterilized lots were adequately reworked</li> <li>Task 7 - Verify re-sterilized lots were adequately tested</li> </ul>	<p>CP 7382.830A contains a number of additional tasks to be accomplished for a sterile device. E.g. Attach. B requires approximately thirty-six additional tasks for the inspection of a manufacturer who uses an irradiation contract sterilizer</p>
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<b>Inspect MDR, C&amp;R and Tracking (Conducted during inspection of CAPA)</b>	Reference: QSRT Handbook
MDR:	
Objective 1: Verify... Task 1 - Written MDR procedures address the requirements of 803.17	
Objective 2: Verify... (Sample Tables) Task 1 - MDR event files are prominently IDed Task 2 - MDR event files are easy to access Confirm... Task 3 - MDR event files contain the necessary information	
Objective 3: Confirm... (Sample Tables) Task 1 - That the appropriate MDR information is identified Task 2 - That the appropriate MDR information is reviewed Task 3 - That the appropriate MDR information is documented Task 4 - That the appropriate MDR information is filed	
Objective 4: Confirm... (Sample Tables) Task 1 - That the procedures are effective (review unreported event files) Determine... Task 2 - The firm's rationale for not filing MDR's for apparent MDR events	
C&R:	
Objective 1: Determine... Task 1 - Whether the firm has implemented any corrections Task 2 - Whether the firm has implemented any removals	
Objective 2: Confirm... (Sample Tables) Task 1 - Select and review files of reported C&R's Task 2 - Select and review files of other CARA's for C&R's	
Objective 2: Verify... (Sample Tables) Task 1 - Files of non-reportable C&R's are maintained Task 2 - Files contain the necessary information Task 3 - The files are retained for the appropriate amount of time	

Confirm...  
Task 4 - The files do not contain evidence of unreported recalls

Task 5 - Any claims for exemption  
Verify...  
Task 6 - If device was sold to another firm, files were transferred

Tracking:

Objective 1: Determine...  
Task 1 - If the firm manufactures a tracked device

Task 2 - If yes, if the firm is aware of its tracking obligations  
Confirm...  
Task 3 - If the device was purchased from another firm, that the prior firm's tracking

records (or equivalents) were obtained

Objective 2: Verify...  
Task 1 - The firm has established a written tracking procedure

Task 2 - The procedure contains the necessary requirements

Task 3 - Information requested by FDA is provided as requested  
Task 4 - Information requested by FDA is provided within timeframes

Objective 3: Confirm...  
Task 1 - The firm has audited its tracking system

Task 2 - The audit procedures are complete

**Number of Tasks and Number of References Required to Conduct (1) A Comprehensive Inspection of a Non-Sterile Medical Device Manufacturer and (2) A Comprehensive Inspection of a Sterile Medical Device Manufacturer**

Regulatory Requirement	QSIT	T1997C	QSIT	T1997C	Comments
Quality System Regulation (non-sterile device)	110	171*	1	3***	* Does NOT include: confirmation of PMA site approval or PMA, Class III 510(k) tasks (4 ea.) **(1) DRAFT CP 7382.830, (2) Guide to Inspections of Medical Device Manufacturers (3) Design Control Report and Guidance 7382.830A
Quality System Regulation (sterile device****)	122	214*	1	4****	****Device man. determines bioburden, contract irradiation sterilization ****(1) DRAFT CP 7382.830 (2) Guide to Inspections of Medical Device Manufacturers (3) Design Control Report and Guidance (4) CP 7382.830A
Medical Device Reporting	10	12	1	2	
Medical Device Tracking	9	3	1	2	
Medical Device Corrections and Removals	10	2	1	0	
Total Number of Tasks (non-sterile device)	139	188	1	3**	
Total number of references required					
Total Number of tasks (sterile device****)	151	231	1	4****	
Total number of references required					

## QSIT VALIDATION WORKSHEET

<b>Item #</b>	<b>Goal/Outcome</b>	
O1A (Activity 2)	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
<b>Term<sup>1</sup></b>	<b>Type of activity</b> (test or analysis)	<b>Parameter(s)</b> to be measured
Short	Test	The comparison of FDA 483 items to the steps in the flowcharts in the QSIT Handbook.
<b>Scope and nature of the process to be followed.<sup>2</sup></b>	<p>During a Study initiated on 10/1/98 and having a target completion date of 12/31/98, QSIT trained investigators in DEN-DO, LOS-DO and MIN-DO are to conduct comprehensive medical device Quality System inspections using the QSIT. A total of 12 trained investigators are participating in the Study. Each investigator is to conduct a target minimum of 4 QSIT inspections.</p> <p>Beginning the week of 1/11/99, the FDA 483s for the QSIT Study inspections will be reviewed by C. Tylka, HFZ-320. The QS regulation FDA 483 items will be compared to the steps of the flowcharts in the QSIT Handbook. The flowchart steps correspond to the key elements of the firm's Quality System that are to be evaluated when performing a QSIT inspection.</p> <p>The results of the reviews will be tabulated and assessed for each of the three Districts participating in the Study.</p> <p>The match of QS regulation FDA 483 items to the flowchart steps will indicate that the key elements of the Quality System were evaluated during the inspection as directed by the QSIT. Evaluation of key elements among districts correlates to a consistent approach to conducting inspections.*</p> <p>Overall responsibility for this activity: T. Wells (HFZ-332) and G. Layloff (HFR-SW450)</p>	
<p>*Note: Goal/Outcome O1B addresses consistency among investigators within the Study Districts.</p>		
<b>Acceptance criteria (if known)</b>	Majority of the FDA 483 items correspond to the steps of the QSIT flowcharts.	
<b>(strengths and weaknesses of this validation activity)</b>	Extent to which the activity measures/confirms how well the goal/outcome has been met. <sup>3</sup>	
<b>Reason(s) why the activity represents one of the best approaches to measuring the accomplishment of the goal/outcome.</b>	This pre-deployment activity will demonstrate if the QSIT directives regarding the evaluation of key elements are being followed consistently among districts.	

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<sup>1</sup> Short term = pre-deployment event, long-term = post-deployment event

<sup>2</sup> Describe who, what, where, when, and how. Include an identification of baseline data that may be useful for comparing QSIT performance to the existing approach.

<sup>3</sup> Include a discussion of any limitations in the ability of the activity to objectively measure the goal/outcome.

## QSIT VALIDATION ACTIVITY REPORT

<b>Item #</b>	<b>Goal/Outcome</b>	
O1A	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
<b>Activity #</b>	<b>Type of activity</b> (test or analysis)	<b>Parameter(s)</b> to be measured
2	Test	The comparison of FDA 483 items to the steps in the flowcharts in the QSIT Handbook.
<b>Acceptance Criteria</b>	Majority of the FDA 483 items correspond to the steps of the QSIT flowcharts.	
<b>Summary of Results</b>	<p>The QSIT Study was initiated on 10/1/98. It had a target completion date of 12/31/98. This date was extended to 2/19/99 in order to allow for the completion of at least 40 total QSIT inspections. During the Study period, 12 QSIT trained investigators, 4 each in DEN-DO, LOS-DO and MIN-DO, conducted medical device Quality System inspections using the QSIT.</p> <p>A total of 42 QSIT inspections were conducted during the Study. A total of 28 FDA 483s containing a total of 200 items were issued during those inspections.</p> <p>The FDA 483s were reviewed by HFZ-320 and the individual FDA 483 items were compared to the steps of the flowcharts in the QSIT Handbook.</p> <p>A tabulation of the results is attached.</p> <p>A total of 178 of the 200 FDA 483 items were found to match the QSIT Handbook flowchart steps. Of the remaining 22 items, 10 were directly linked to CAPA and PAPC flowchart steps. The remaining 12 items appear to be linked to PAPC flowchart steps.</p>	
	The findings do [X] do not [ ] meet the acceptance criteria for this activity.	
<b>Additional Comments</b>	The frequency of subsystem deficiencies was not level across the Districts. For example, deficiencies in Management were cited at a rate of approx. 3/1 (i.e. 3 FDA 483 items per FDA 483 issued) in District 1, 0.4/1 in District 2, and 2/1 in District 3. The cause(s) of this aberration is unknown.	
<b>Activity Champion(s)</b>	Georgia Layloff (HFR-SW450) and Timothy Wells (HFZ-332)	

Item # O1A (Activity 2)

FDA483 Review Results  
(QS Regulation Deficiencies)

	C	O	D	E	M	G	M	T	4a	4b	5	6	D	E	S	I	G	N	7	8	9	10	11	12	13	14	15		
	1	2	3	4	1	2	3	4	1	2	1	2	1	2	3	4	1	2	1	2	1	2	1	2	1	2			
C	1	A	A	B	1	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
O																													
D																													
E																													
M	1				3						1									1	3	1	1	1	1	1	1		
G	2																										1	4	
M	3a																										0	0	
T	3b								1	1		2								1	2	1					8		
4a	1								1												1							5	
4b																												0	
5	2								1	2	1	1	2	1								1	1			12			
6	2	1							1	1	2	1	2	2	1						1	1	1				16		
D	1																											1	
E	2																											3	
S	3																											0	
I	4																											0	
G	5																											1	
N	6																											2	
7																			1								1		
8																			2								2		
9																			1								1		
10																												0	
11																			1								2		
12																					1						1		
13		1																	2								7		
14																					1						4		
15																					1						0		

- <sup>1</sup> Linkage between PAPC and D&R
- <sup>2</sup> Linkage between CAPA and D&R

## QSIT VALIDATION WORKSHEET

<b>Item #</b>	<b>Goal/Outcome</b>	
O1A (Activity 3)	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
<b>Term<sup>1</sup></b>	<b>Type of activity (test or analysis)</b>	<b>Parameter(s) to be measured</b>
Short	Test	Coverage of the 4 major subsystems of QSIT as reported in the EIR.
<b>Scope and nature of the process to be followed.<sup>2</sup></b>	<p>The QSIT directs coverage of 4 major subsystems of the Quality System – Management Controls, Design Controls, Corrective and Preventive Action, and Production and Process Controls.</p> <p>During a Study initiated on 10/1/98 and having a target completion date of 12/31/98, QSIT trained investigators in DEN-DO, LOS-DO and MIN-DO are to conduct comprehensive medical device Quality System inspections using the QSIT. A total of 12 trained investigators are participating in the Study. Each investigator is to conduct a target minimum of 4 QSIT inspections.</p> <p>Beginning the week of 1/11/99, the EIRs for the QSIT Study inspections will be reviewed to determine if the major subsystems were covered during the Study inspections. The results of the reviews will be tabulated and assessed for each of the three Districts participating in the Study.</p> <p>The match of EIR reported coverage to the 4 major subsystems will indicate that the subsystems were evaluated during the inspection as directed by the QSIT. Coverage of the 4 major subsystems among districts correlates to a consistent approach to conducting inspections*.</p> <p>Overall responsibility for this activity: T. Wells (HFZ-332) and G. Layloff (HFR-SW450)</p> <p><b>*Note: Goal/Outcome O1B addresses consistency among investigators within the Study Districts.</b></p>	
<b>Acceptance criteria (if known)</b>	Majority of EIRs report coverage of the 4 major subsystems	
<b>Extent to which the activity measures/confirms how well the goal/outcome has been met.<sup>3</sup> (strengths and weaknesses of this validation activity)</b>	This activity will provide a direct and objective measurement of whether the directives of QSIT coverage of the 4 major subsystems were followed. The following of the QSIT directives among districts correlates to a consistent approach to conducting inspections. This activity does not determine if consistency among districts has increased.	
<b>Reason(s) why the activity represents one of the best approaches to measuring the accomplishment of the goal/outcome.</b>	This pre-deployment activity will demonstrate if the QSIT directives regarding the coverage of the 4 major subsystems are being followed consistently among districts.	

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<sup>1</sup> Short term = pre-deployment event, long-term = post-deployment event

<sup>2</sup> Describe who, what, where, when, and how. Include an identification of baseline data that may be useful for comparing QSIT performance to the existing approach.

<sup>3</sup> Include a discussion of any limitations in the ability of the activity to objectively measure the goal/outcome.

## QSIT VALIDATION ACTIVITY REPORT

<b>Item #</b>	<b>Goal/Outcome</b>	
O1A	Increase consistency among districts for conducting comprehensive Quality System inspections of medical device manufacturers.	
<b>Activity #</b>	<b>Type of activity</b> (test or analysis)	<b>Parameter(s)</b> to be measured
3	Test	Coverage of the 4 major subsystems of QSIT as reported in the EIR.
<b>Acceptance Criteria</b>	Majority of EIRs report coverage of the 4 major subsystems.	
<b>Summary of Results</b>	<p>The QSIT Study directs coverage of 4 major subsystems of the Quality System.</p> <p>The QSIT Study was initiated on 10/1/98. It had a target completion date of 12/31/98. This date was extended to 2/19/99 in order to allow for the completion of at least 40 total QSIT inspections. During the Study period, 12 QSIT trained investigators, 4 each in DEN-DO, LOS-DO and MIN-DO, conducted medical device Quality System inspections using the QSIT.</p> <p>A total of 42 QSIT inspections were conducted during the Study. The EIRs from 40 of those inspections were submitted for review by COB 3/10/99. The submitted EIRs were reviewed to determine if the 4 major subsystems were covered during the Study inspections.</p> <p>A tabulation of review results is attached.</p> <p>Of the 40 EIRs reviewed, 39 reported coverage of the 4 major subsystems. In one instance, coverage of Design Controls was not attempted because Design Controls had been assessed during a previous EI of 6/25-7/10/98 and found to be NAI.</p>	
	The findings do [X] do not [ ] meet the acceptance criteria for this activity.	
<b>Additional Comments</b>	<p>When objectionable conditions are observed based upon samples of records chosen using the sampling tables found within the QSIT Handbook, the Sampling Plans Instructions contained in the Handbook direct investigators to state in the EIR the Sampling Table and Row used to select their samples. The EIR review revealed that, in general, references to the Sampling Table and Row were not being made by the investigators. While not directly related to this particular activity, this issue is related to the Outcome O1 - Increase Consistency. Therefore, the Handbook has been revised to provide clearer instructions to the investigators regarding sampling and reporting. In addition, QSIT training materials are being designed to address this area.</p>	
<b>Activity Champion(s)</b>	Georgia Layloff (HFR-SW450) and Timothy Wells (HFZ-332)	

Item # O1A (Activity 3)

EIR review for reported coverage of the 4 major subsystems.

TABULATION of REVIEW RESULTS

Inspection Code	Yes	No	Comment	*
1A1	X			B
1A2	X			B
1A3	X			B
1A4			EIR not submitted by COB 3/10/99	B
1B1	X			B
1B2	X			B
1B3	X			B
1C1	X			A
1C2	X			A
1C3	X			A
1C4	X			A
1D1	X			C
1D2	X			C
1D3	X			C
1D4	X			C
2A1	X			A
2B1	X			C
2B2	X			C
2B3	X			C
2C1	X			C
2C2	X			C
2C3	X			C
2C4	X			C
2D1	X			B
2D2	X			B
2D3	X			B
2D4		X	Design controls NAI during previous EI 6/25-7/10/98. Not covered during QSIT inspection.	B
3A1	X			C
3A2	X			C
3A3	X			C
3A4			EIR not submitted by COB 3/10/99.	C
3B1	X			C
3B2	X			C
3B3	X			C
3B4	X			C
3C1	X			B
3C2	X			B

Inspection Code	Yes	No	Comment	*
3C3	X			B
3C4	X			B
3D1	X			A
3D2	X			A
3D3	X			A
Total	39	1		

\*Time in position as investigator, where A = 1-5 years, B = 6-10 years, and C >10 years

Note: When objectionable conditions are observed based upon samples chosen using the sampling tables found within the QSIT Handbook, the Sampling Plans Instructions contained in the Handbook direct investigators to state in the EIR the Sampling Table and Row used to select their samples. The EIR review revealed that, in general, references to the Sampling Table and Row were not being made by the investigators.